

The diagram illustrates the experimental setup for the laser-assisted micro-rolling process. It shows a workpiece (11) being rolled by a roller (10) against a guide (12). A laser beam (14) is directed at the interface between the workpiece and the roller. The workpiece is supported by a base (20). A coordinate system (x-axis, y-axis, z-axis) is shown at the bottom right.

Fig. 1

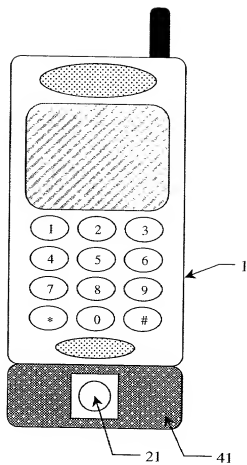


Fig. 2a

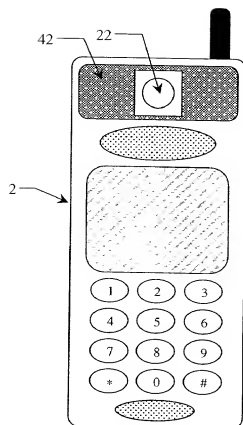


Fig. 2b

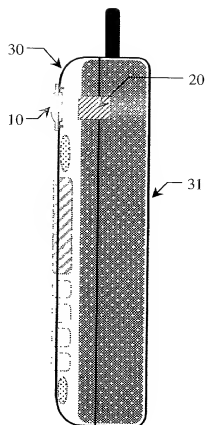


Fig. 2c

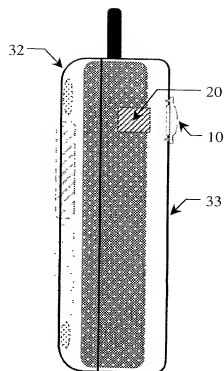


Fig. 2d

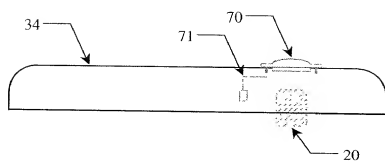


Fig. 3a
(side view)

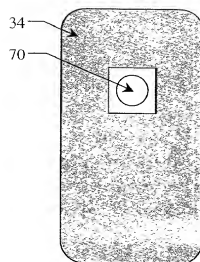


Fig. 3b
(back view)

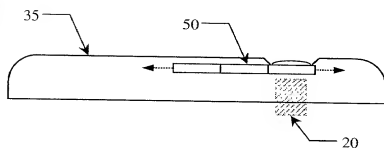


Fig. 4a
(side view)

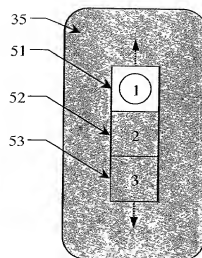


Fig. 4b
(back view)

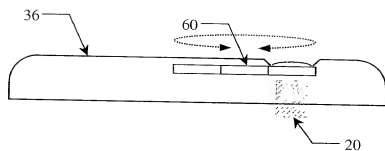


Fig. 5a
(side view)

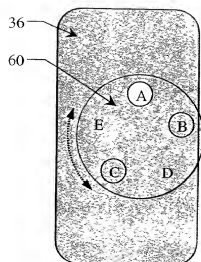


Fig. 5b
(back view)

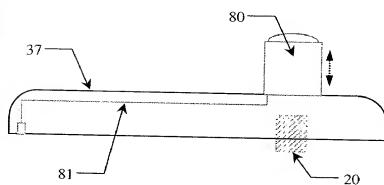


Fig. 6a
(side view)

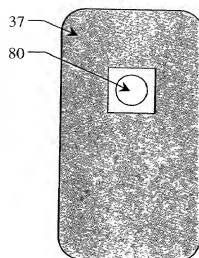


Fig. 6b
(back view)

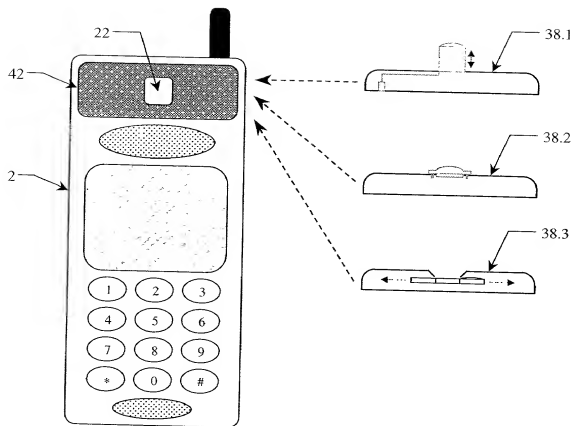


Fig. 7